

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 08-034785

(43)Date of publication of application : 06.02.1996

(51)Int.Cl. C07D451/12
A61K 31/47
A61K 31/47
C07D451/04

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(30)Priority

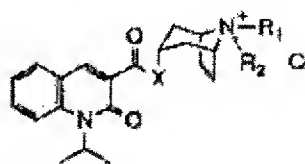
Priority number : 06101438 Priority date : 17.05.1994 Priority country : JP

(54) QUATERNARY SALT COMPOUND OF QUINOLINECARBOXYLIC ACID

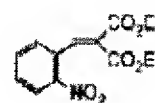
(57)Abstract:

PURPOSE: To obtain a compound having a serotonin 4 receptor stimulating effect and effective for improvement of alimentary symptoms such as heartburn or anorexia caused by chronic gastritis or diabetes or accompanying a surgery such as gastrectomy and therapy of regurgitant esophagitis, spurious intestinal obstruction, constipation, etc.

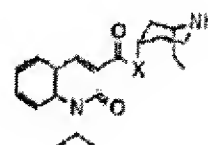
CONSTITUTION: A compound of formula I (X is O or imino; R1 and R2 are each a 1 to 15C alkyl or an aralkyl; Q is a halogen or tosylate), e.g. end-N-[8-(n-heptyl)-8-methyl-8-azoniabicyclo[3.2.1]oct-3-yl]-1-isopropyl-2-oxo-1,2-dihydro-3-quinolinecarboxamide-bromide. The compound of formula I is synthesized by using a compound of formula II as the starting substance,



I



II



III

conducting reductive ring closure reaction, N-isopropylation, hydrolysis, esterification or amidation and demethylation in order to obtain a compound of formula III, then reacting a compound of the formula R1Q therewith and subsequently further reacting a compound of the formula R2Q therewith.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]